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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/667,345	09/22/2000	Paul R. Goldberg	11693 M-10926-1P US	9551

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EXAMINER

KNEPPER, DAVID D

ART UNIT PAPER NUMBER

2654

DATE MAILED: 05/24/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/667,345

Applicant(s)

GOLDBERG ET AL.

Examiner

David D. Knepper

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on IDS (21 March 2002).
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-79 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Applicant's correspondence filed on 21 March 2002 (IDS, paper #5) has been received and considered. Claims 1-79 are pending.

Title

2. The title of the invention is identical to the Title of 09/570,655. Prosecution may be assisted if the difference between applications is reflected in the title. A new title is required that is clearly indicative of the invention to which the claims are directed.

Abstract

3. The Abstract of the Disclosure is objected to because it is identical to the Abstract of 09/570,655. Prosecution may be assisted if the difference between applications is reflected in the abstract. Correction is required. See M.P.E.P. § 608.01(b).

Priority Claims

4. The applicant(s) should check their filing receipts and/or the Patent Application Information Retrieval (PAIR) system for the acknowledgment of their **domestic** priority or benefit claims (if any) under 35 USC 119(e), 120 or 121 (37 CFR 1.78).

Specification

5. The disclosure is objected to because of the following informalities:

Appropriate correction is required.

Claims

6. Claims 14-26, 60, 62-76 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14-70: The preamble indicates that a “method of compressing an audio signal”. However, the remainder of the claim fails to provide a method for compressing audio. To the contrary, the remainder of the claim repeats elements of claim 1, which indicate that the invention is for modifying a signal to cause quality to be reduced when compressed and decompressed. The method of compressing is not addressed.

Claim 71 fails to further limit the independent claims (i.e. – 44) because the independent claim already contains “one or more algorithms” in greater specificity than present in claim 71 (claim 44 = “processing”, “adding”, “compression”, “decompressed”). Similarly, the independent claims have more specific limitations towards “algorithms that are adjusted...as a function of the audio signal” (claim 44 = “adding to said original signal”, “one or more frequency bands of the original signal”, “time synchronized with respect to the original signal”, “human ear cannot perceive the presence of the replica”, “reduced quality that is perceivable by the human ear”).

Claims 72-74 are vague because they fail to specify the purpose of any processing algorithms from which to select. It is therefore impossible to determine the purpose or the conditions that would allow a meaningful selection with a predictable result or modification.

Claim 75 is redundant over the frequency (i.e. – claim 44).

Claim 76 is redundant over the channels (i.e. – claim 48).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-23, 26-30, 33-38, 42-79 are rejected under 35 U.S.C. § 103 as being unpatentable over Warren (5,719,937).

As per claims 1, 14, 27, 33, 36, 38, 44, 48, 54, 57, 60-67 and 69-79: “Modifying the audio signal in a manner that does not change a perception of the signal by a human ear” is taught by Warren in column 2, lines 28-31 where he teaches that his control tag and mater tag information may be...spectrally shaped and power-adjusted...to render them substantially imperceptible.

Causing the signal “to be altered by compression such that a reduced quality is perceivable by the human ear in a sound signal reproduced from a decompressed version of the compressed signal” is taught in column 2, lines 51-53 where he teaches that as additional generations of copies are made, the quality or fidelity of the underlying data signal is reduced.

The use of “two or more audio channels” is taught in column 5, lines 66-67 with his indication that the signal may include multiple audio tracks for high-fidelity reproduction.

It is noted that Warren does not explicitly use the term “compression” combined with “decompressed” versions as claimed. However, he teaches that his method is meant to work with compressed digital audio streams such as those, which follow the MPEG, Musicam, and Dolby AC-2 and AC-3 formats. Therefore, it would have been obvious for a person having ordinary skill in the pertinent art, at the time the invention was made, to modify audio data to degrade the signal as it is compressed and decompressed more than once because Warren explicitly teaches that his copy management system is also designed to work with common compression methods such as those listed above which rely on psychoacoustic masking properties and varying block sizes.

Claims 2-8, 15-21, 35 and 37: Storing data on these types of media is notoriously well known in the art as suggested by his use of various known storage media listed in column 1, lines 28-30. He teaches combinations of audio, video and data in column 5, line 64.

Claims 9, 10, 22, 26, 28-30, 34, 42, 43, 45, 46, 68: “Increasing levels of certain frequency components of the audio signal” is taught by his spread spectrum signals which are spectrally shaped and power-adjusted (col. 2, lines 28-30). The compression formats for digital audio streams noted above all select the number of bits based on psychoacoustic masking thresholds based on frequency band analysis (i.e. – Fourier transform).

Claim 11, 23: Including “at least first and second channel signals” is taught in column 5, lines 66-67 with his indication that the signal may include multiple audio tracks for high-fidelity reproduction.

Claim 12, 13, 44, 47-53, 55, 56, 58, 59, 65: Altering “timing or phase relationships” is suggested in column 8, lines 35-40 where he teaches that when an audio source includes multiple

channels...data may be embedded in two or more different channels at the same or different times.

Claims : The “Internet” is a notoriously well-known communication network. Warren teaches that it would have been obvious to use his system in other communication networks (see column 11, lines 30-34).

9. Claims 24-25, 31, 32 and 39-41 are rejected under 35 U.S.C. § 103 as being unpatentable over Warren as applied to claims 14 and 38 above, further in view of Park (5,757,909).

Claims 24, 31 and 39: It is noted that Warren does not teach the use of a “sealed appliance”. However Park teaches that it is well known to protect against unauthorized copies. In column 3, lines 3-7, Park teaches that, in the use of MPEG protocol it is known the transport audio and video data independently or concurrently and he teaches the use of a smart card (abstract) and for use with MPEG protocol transports ... audio and video data independently or concurrently (col. 3, lines 3-5).

Claims 25, 32: The “Internet” is a notoriously well-known communication network. Warren teaches that it would have been obvious to use his system in other communication networks (see column 11, lines 30-34).

Claims 40 and 41: See Park’s figure 7 which show the smart card inserted in a system including audio decoder and which contains private algorithms.

Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Fukuda (6,469,239) is cited to show that it is known to embed codes that cause a degradation of quality to discourage illegal copying.

11. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

TC2600 Fax Center
(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Knepper whose telephone number is (703) 305-9644.

The examiner can normally be reached on Monday-Thursday from 07:30 a.m.-6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (703) 305-9645.

Any inquiry of a general nature or relating to the status of this application should be directed to customer service whose telephone number is (703) 306-0377.



David D. Knepper
Primary Examiner
Art Unit 2654
May 17, 2004